



Docket 03546

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of:)

Examiner: Augustine, Nicholas

Mitchell Van Nguyen)

Group Art Unit: 2179

Serial No.: 10/696,610)

Filed: October 28, 2003)

For: IMPROVED PEN-BASED)
COMPUTER INTERFACE SYSTEM)

Mail Stop: Appeal Brief – Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

BRIEF OF APPELLANTS

REAL PARTY IN INTEREST

The real party of interest is and remains the Appellant and inventor, Mitchell Van
Nguyen.

RELATED APPEALS AND INTERFERENCES

There are no related appeals, interferences or judicial proceedings known to the Appellant
or Appellant's legal representative which may be related to, directly affect or be directly affected
by or have a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1 and 3 through 10 are rejected. Claim 2 is canceled. Claims 1 and 3 through 10 are being appealed.

STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

SUMMARY OF CLAIMED SUBJECT MATTER

CLAIM 1

With respect to claim 1, there is set forth a computer interface system operable within a pen-based computer (Figure 1, reference 10, specification page 10, paragraph 0028) having a touch screen display (Figure 1, reference 12, specification page 10, paragraph 0028 and Figures 2A and 2B, specification pages 12 and 13, paragraphs 0031 and 0032) and at least one input button (Figure 1, references 14 through 18, specification page 11, paragraph 0030). The processor includes typical apparatus for processing information and software (Figures 4A through 4C, specification pages 19 through 25) stored in memory for operating the system and configuring the processor. Within the processor system, means are provided for operating the touch screen and processor system in a pan mode or write mode (Figures 4A through 4C, specification pages 19 through 25). A single button (Figure 1, references 15 through 18,

specification page 11, paragraph 0030) is operative to control the mode of system operation in either write or pan modes.

CLAIM 5

A pen-based computer system (Figure 1, reference 10, specification page 10, paragraph 0028) includes a touch screen (Figure 1, reference 12, specification page 10, paragraph 0028 and Figures 2A and 2B specification pages 12 and 13, paragraphs 0031 and 0032), a stylus pen (Figure 1, reference 19, specification page 10, paragraph 0028) and a processor for carrying forward a writing mode to form an image or a pan mode to move the image. Means are provided for causing the processor to operate in a write mode when the button is not actuated and for causing the processor to operate in a pan mode when the button is actuated (Figures 4A through 4C, specification pages 19 through 25).

CLAIM 8

A pen-based computing system (Figure 1, reference 10, specification page 10, paragraph 0028) having a touch screen display (Figure 1, reference 12, specification page 10, paragraph 0028 and Figures 2A and 2B specification pages 12 and 13, paragraphs 0031 and 0032) and a stylus pen (Figure 1, reference 19, specification page 10, paragraph 0028) for writing thereon. A processor within the system is operative in cooperation with the touch screen and pen to provide a writing mode and a panning mode of operation. A button (Figure 1, references 14 through 18,

specification page 11, paragraph 0030) is provided for selecting the write mode of operation when the button is not actuated and a pan mode of operation when the button is actuated.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

1. Claims 1 and 3 through 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Keely, et al. (US 6,337,698).

Examiner contends that the screen icon based system shown in U.S. Patent 6,337,698 (Keely, Jr., et al.) hereinafter "Keely" anticipates the present invention single button mode selection system and supports rejection under 35 U.S.C. 102(b). Examiner further contends that the screen icon selection system utilized in Keely for configuring the system between write mode and pan mode is the same as Appellant's claimed system despite the fact that Appellant's system utilizes a dedicated manually actuatable mode switch button and avoids the need to move the pen from the written image to achieve mode selection. In fact, the system shown in Keely is precisely the type of prior art system (which requires pen stylus manipulation of screen icons to switch modes) toward which the present invention is directed. The present invention is intended to overcome the inefficiency of utilizing manipulations of screen icons (and the attendant pen movements and relocations) to switch between the write and pan modes.

ARGUMENTS

OVERVIEW

By way of overview, the present invention interface system is used in combination with a pen-based computer system typically of the type known in the art as a personal digital assistant (PDA) or similar device characterized by a small handheld housing which supports a touch-sensitive display screen together with one or more user operable buttons positioned upon the housing for easy access by the user. The housing further supports a microprocessor-based computing system together with cooperative circuitry and memory which facilitate the touch-screen operation of the system in response to manipulation of the user buttons and a stylus pen. The latter is utilized in writing upon the touch-sensitive screen and for moving written images to different locations upon the screen. The process of imposing a written image upon the touch-sensitive screen is generally referred to as operating the system in a "write mode" while the process of operating the system so as to move a written image to a different location upon the touch screen is typically referred to as the "pan mode". Such small handheld computer units are also operable in response to pen actuation of various icons or control images upon the touch screen.

In the operational environment toward which the present invention is particularly directed, the user holds the unit in one hand while writing upon the touch screen using the pen stylus with the other hand. During this process, most of the activity by the user consists of

writing upon the touch screen and, from time to time, panning or moving the created image to a different location upon the touch screen. Often this panning takes place because of the limited surface area available on the touch screen. In other words, the user writes until the user encounters proximity to the edge of the screen and then must switch to a pan mode to move the accumulated writing to the left and create more writing space. In the prior art, the switch from write mode to pan mode is accomplished by pen stylus contact with screen icons or scroll bars.

In accordance with an important aspect of the present invention, the structure set forth in Appellant's claims greatly facilitates the switch from write mode to pan mode and back to write mode without resort to screen icons and pen manipulation upon the screen. In the inventive system, a dedicated button on the housing of the handheld unit is established to implement a write mode or a pan mode solely in response to pressing or not pressing a dedicated mode switch button. This dedicated button is intended to be manipulated by the non-writing hand of the user which is holding the unit. As a result, the user is able to maintain the stylus proximity to the writing portion of the on-screen image and rapidly switch between write mode and pan mode by simply pressing or not pressing the dedicated mode switch button. This has been found to be substantially faster than the screen touch icon based systems in the prior art all of which require movements of the pen stylus back and forth between the writing image and the touch screen icons. With this overview in mind, Appellant summarizes each independent claim below.

CLAIMS 1, 3, 4, 6, 7, 9 and 10

Examiner bases rejection of Appellant's claims upon U.S. Patent 6,337,698 (Keely, Jr. et al.) hereinafter "Keely". Keely describes at column 3, lines 50 through 60 a notebook or notepad

computer having an LCD touch screen display which is "page sized". The page sized display includes a border upon which a plurality of on-screen tools or status indicators including write mode and pan mode are formed as computer generated images.

At column, lines 3 through 13, Keely describes that the modes of operation of the computer system are selected (1) by pen location upon the touch screen near a displayed element or icon in the border or (2) by pen orientation as provided for example by pointing the pen toward the bottom of the page or (3) by successive pen taps upon an on-screen icon. For example, tap on, tap off in a toggle type arrangement.

The system shown in Keely is typical of the less than efficient prior art systems which the present invention dramatically improves. Keely is also best suited for operation in the environment of larger notebook, laptop or desktop computing system. Keely is not suited for operation in a handheld personal digital assistant or PDA type device.

The problem which arises in systems such as Keely is that during the writing process the user upon encountering an edge of the display or otherwise desiring to move or pan the written image must completely stop the writing process. This interruption of the writing process is necessitated by the need on the user's part to move the stylus from the point of writing to a selected icon within the display screen border or reorient or relocate the pen upon the page or finally tap the desired icon with the pen in order to switch from the write mode to the pan mode. Thereafter, the user must move the pen back to the written image and move the image in a panning process. Next, in order to resume writing, the user must again move the pen and return

to the icons on the border of the display screen or, employing the above-mentioned pen manipulations, switch the system back to the write mode. Finally, the user is able to return the pen to the written image in order to continue writing.

In contrast, the present invention system is carried forward with virtually no interruption of the writing process and without the need to move the pen from the writing image. As is illustrated in Appellant's Figures 2A and 2B in the present invention system, the user, while maintaining the pen position on the written material, simply presses the mode switch button (switching to pan mode) and thereafter moves the pen and the image to the desired position. Once the image is moved, the user releases the mode switch button (returning to write mode), again without moving the pen, and continues writing. This entire process, once familiar to the user, is carried forward with virtually no interruption of the writing process. Literally "write-press-pan-write".

Examiner contends that the screen icon mode selection system of Keely is the same as (or presumably equivalent to) the single dedicated mode switch button of the inventive system. Examiner contends that "all GUI elements and buttons are under the same category of visual cues to the user that perform the same function when activated" (see September 28, 2007 Rejection, page 3, lines 3, 4 and 5). It is believed that the Examiner errs in his application of this belief. A manually actuated button and a screen pen touch icon selection element are simply not the same nor are they equivalent in the environment toward which the present invention is directed and in the inventive system.

Appellant's invention is not a button. It is the claimed Appellant's system together with the single button which is different from the system and environment of Keely or the remainder of the prior art. The results of Appellant's system are also correspondingly different from the operation of Keely and the remainder of the prior art.

That the Appellant's system differs from Keely and the remainder of the prior art is clear. However, examination of the differences of the operation of each type of system renders this distinction all the more clear and unavoidable.

Consider, for example, the vexing problem which arises as the user writing on the screen approaches or reaches the edge of the display screen. In the prior art devices such as Keely, the writer must:

- Stop writing and move the pen to the scroll icons in order to switch to pan mode
- Move the pen back to the written image
- Scroll the written image to provide writing space
- Move the pen back to the icons in order to return to the write mode
- Return the pen to the writing location
- Continue writing

With the advantages of the present invention system, the writer upon reaching the display edge, simply:

- Presses the mode select button to change from write to pan mode while moving the pen to create writing space
- Releases the mode select button to change back to write mode and continues writing

All of which is carried forward without moving the pen from the written image and virtually without significant interruption of writing.

It is believed therefore in view of the foregoing arguments and remarks that Examiner's rejection of claims 1, 3, 4, 6, 7, 9 and 10 under 35 U.S.C. 102 (b) based upon Keely is incorrect and it is respectfully requested that the Board reverse the Examiner on this rejection.

CLAIM 5

Regarding Examiner's rejection of Appellant's claim 5 under 35 U.S.C. 102(1) based upon Keely, it is believed the foregoing remarks and arguments set forth above in relation to Examiner's rejection of claims 1, 3, 4, 6, 7, 9 and 10 apply with equal force to the rejection of claim 5 and are incorporated herein in regard to claim 5.

In addition, claim 5 sets forth that the single button for user selection between operations of writing or panning is utilized in combination with means for causing the processor to implement writing in response to the button being non-activated and for causing the processor to implement panning in response to the button being activated.

The utilization of the non-activated button position for the writing mode and the implementation of the panning mode in response to button activation is directed specifically to the advantageous use of the present invention in the process of writing upon the display screen. With the button non-activated (that is, not pressed), the user carries forward the extensive writing operation. Utilizing the pan mode in response to the button activation (button pressing) facilitates this temporary shift to the pan mode for the brief interval required to move the written text upon the display. Thereafter, the simple release of the button resumes the writing mode and the user continues writing. Thus, it has been found to be particularly advantageous to utilize the arrangement of write mode corresponding to button non-activation and pan mode corresponding to button activation to speed the writing and panning process.

In contrast, Keely simply does not provide this preferential assignment of activation or non-activation of the screen icon touch-based system which Keely employs. There is no preference or difference in selection activity between the transition from write mode to pan mode or from pan mode to write mode.

Thus, it is believed in view of the arguments and remarks set forth above as incorporated and the additional arguments and remarks set forth herein that Examiner's rejection of Appellant's claim 5 under 35 U.S.C. 102(b) based upon Keely is in error and the Board is respectfully requested to reverse the Examiner's rejection.

CLAIM 8

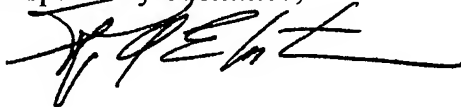
It is believed that Appellant's arguments and remarks set forth above in connection with Examiner's rejection of Appellant's claims 1, 3, 4, 6, 7, 9 and 10 apply equally well to Examiner's rejection of claim 8 and are thus reiterated herein.

In addition, claim 8 is directed to a situation in which substantially more panning mode operation rather than write mode operation is contemplated. Accordingly, claim 8 sets forth means for causing the system to operate in a writing mode only in response to button actuation and to remain in a pan mode in response to button non-actuation. In essence, the subject matter of claim 8 is directed to the reverse of the system in claim 5.

Thus, it is believed in view of the above-reiterated arguments and the arguments set forth herein that Examiner errs in rejecting Appellant's claim 8.

Accordingly, it is believed that Examiner errs in rejecting claims 1 and 3 through 10 and it is respectfully requested that the Board reverse the Examiner and allow the present application to be allowed and passed to issue.

Respectfully Submitted,



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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first-class mail in an envelope addressed to:

Commissioner for Patents, P.O. Box 1450,
Alexandria, VA 22313-1450, on June 30, 2008

By: Roy A. Ekstrand

Signature: 

Date: June 30, 2008

CLAIMS APPENDIX

1. A pen-based computer interface system comprising:

a pen-based computer having a touch sensitive display screen, at least one input button, a stylus pen and a memory based processor having a stored operating system therein;

means for causing said processor to operate in a write mode characterized by displaying the movement path of said pen upon said display screen;

means for causing said processor to operate in a pan mode characterized by the movement of said movement path within said display screen in response to pen contact with and movement upon said display screen;

means for operating said processor in either said write mode or said pan mode;

and

a single button for controlling said means for operating to allow a user to select said write mode or said pan mode.

3. The interface system set forth in claim 1 wherein said button is a normally open momentary contact switch.

4. The interface system set forth in claim 3 wherein said write mode is selected when said button is open and said pan mode is selected when said button is pressed and closed.

5. A pen-based computer interface system comprising:

a pen-based computer having a touch-sensitive display screen and stylus pen together with a processor for writing upon said display screen as said pen touches and is moved upon said display screen to create a write image and for panning said write image in response to pen contact and movement of said pen upon said display screen;

a single button for user selection between operations of writing or panning;

means for causing said processor to implement writing in response to said button being non activated; and

means for causing said processor to implement panning in response to said button being activated.

6. The interface system set forth in claim 3 wherein said pan mode is selected when said button is open and said write mode is selected when said button is pressed and closed.

7. The interface system set forth in claim 1 wherein said button is a normally closed momentary contact switch.

8. A pen-based computer interface system comprising:

a pen-based computer having a touch-sensitive display screen and stylus pen together with a processor for writing upon said display screen as said stylus pen is moved upon said display screen to form a written image and for panning said written image in response to stylus pen contact and movement said stylus pen upon said display screen;

a button for user selection between operations of writing or panning;

means for causing said processor to implement writing in response to said button being activated; and

means for causing said processor to implement panning in response to said button being non activated.

9. The interface system set forth in claim 7 wherein said write mode is selected when said button is open and said pan mode is selected when said button is pressed and opened.

10. The interface system set forth in claim 7 wherein said pan mode is selected when said button is open and said write mode is selected when said button is pressed and opened.

EVIDENCE APPENDIX

No evidence pursuant to sections 1.130, 1.131 or 1.132 has been submitted.

RELATED PROCEEDINGS APPENDIX

No decisions have been rendered by a court or the Board in any proceeding related to this appeal.